

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Canceled)

Claim 2 (Currently Amended): An end point detector according to Claim ~~[[1]]~~ 6, wherein at least one of said collector ~~barrel~~ barrels is formed of an etch-resistant material that does not reacting react with an etching gas of said the etching equipment.

Claim 3 (Currently Amended): An end point detector according to Claim 2, wherein said at least one collector barrel is formed of either carbon or a metal.

Claim 4 (Original): An end point detector according to Claim 3, wherein said metal material is aluminum covered on a surface thereof with a layer of aluminum oxide.

Claim 5 (Currently Amended): An end point detector according to Claim ~~[[1]]~~ 2, wherein said at least one collector barrel has a shape such that ~~[[the]]~~ an internal diameter gradually increases from a proximal end thereof to a distal end thereof.

Claim 6 (Currently Amended): ~~[[An]]~~ For use with a plasma-utilized etching equipment, an end point detector for detecting a monitor light to control an operation of an etching

process by the etching equipment based on changes in the monitor light emitted by the etching equipment, the end point detector according to Claim 1, further comprising:

a sensor body for detecting the monitor light; and

a plurality of collector barrels for guiding the monitor light from the etching equipment to said sensor body, wherein said collector barrels are detachable from said sensor body a plurality of collector barrels[[,]] including said collector barrel,

wherein said plurality of collector barrels are selectively detachable from said sensor body and selectively used to adjust a quantity of light received at said sensor body.

Claim 7 (Currently Amended): An end point detector according to Claim 6, wherein said plurality of collector barrels ~~differ in~~ have different respective roughness of an internal circumferential surface.

Claim 8 (Currently Amended): An end point detector according to Claim 6, wherein said plurality of collector barrels ~~differ in~~ have different respective internal diameter.

Claim 9 (Current Amended): An end point detector according to Claim 6, wherein said plurality of collector barrels ~~differ in~~ have different respective length.

Claim 10 (Currently Amended): An end point detector according to Claim 6, wherein at least one of said plurality of collector barrels ~~increases in~~ has an internal diameter that gradually increases from a proximal end thereof as a connection to said sensor body to a distal end thereof.

Claim 11 (Currently Amended): An end point detector according to Claim 10, wherein said plurality of collector barrels include at least two collector barrels ~~with~~ having internal diameters that increase at respective different rates ~~of increase in internal diameter~~.

Claims 12-15 (Canceled)

Claim 16 (New): An end point detection method for use with etching equipment, that detects a monitor light emitted by the etching equipment to control operation of an etching process by the etching equipment based on changes of the monitor light, the end point detection method comprising:

providing a sensor body having a sensor therein that detects the monitor light;

providing a plurality of collector barrels having respectively different physical characteristics that are detachably mountable to the sensor body for guiding the monitor light to the sensor;

selecting one of the plurality of collector barrels having a physical characteristic suitable for a particular etching process; and

detachably mounting the selected one of the plurality of collector barrels to the sensor body.

Claim 17 (New): The end point detection method of claim 16, wherein the plurality of collector barrels have respectively different lengths, said selecting comprising selection of a collector barrel having length suitable for the particular etching process.

Claim 18 (New): The end point detection method of claim 16, wherein the plurality of collector barrels have respectively different internal diameters, said selecting comprising selection of a collector barrel having internal diameter suitable for the particular etching process.

Claim 19 (New): The end point detection method of claim 18, wherein the internal diameters of the plurality of collection barrels gradually increase from first ends thereof that are mounted to the sensor body, to second ends thereof remote from the sensor body, at respectively different rates.

Claim 20 (New): The end point detection method of claim 16, wherein the plurality of collector barrels have respectively different internal surface roughnesses, said selecting comprising selection of a collector barrel having internal surface roughness suitable for the particular etching process.

Claim 21 (New): The end point detection method of claim 16, wherein the plurality of collector barrels are made of respectively different materials, said selecting comprising selection of a collector barrel that is made of material suitable for the particular etching process.

Claim 22 (New): The end point detection method of claim 16, wherein the etching process is a plasma etching process.

Claim 23 (New): The end point detection method of claim 16, wherein said selecting

comprises selection of a collector barrel so that a desired quantity of light is guided to the sensor for the particular etching process.